

REMARKS

Claims 5, 6, and 9 are pending, with claims 5 and 9 being currently amended, and claims 7 and 8 and previously withdrawn claims 1-4 being cancelled without prejudice.

Applicants reserve the right to pursue the subject matter of the withdrawn claims in one or more divisional applications.

In the Official Action, claims 5-9 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In claim 5, for example, Examiner states that there is no antecedent basis for "the end" or "the immersed transducer", and that it is not clear what is meant by "process cheese type" or "a carrying out pipe". *See* Official Action, page 3.

In view thereof, independent claim 5, which is the only independent claim, has been amended to more clearly define the invention. In particular, antecedent basis for "the end" (line 6) and "the immersed transducer" (line 14) has been corrected. And, claim 5 now more clearly recites a continuous emulsification equipment for producing a type of process cheese which includes, in part, a carrying out pipe one end of which is connected to an outlet of the cooling device for carrying the type of process cheese, which is already emulsified, from the cooling device. In addition, dependent claim 9 has been similarly amended to recite a continuous production equipment for producing a type of process cheese comprising, in part, a kneader for kneading ingredients for the type of process cheese. Support for the amendments can be found throughout the specification.

In view of the foregoing, Applicants submit that claims 5-9 are not at all indefinite. Thus, the §112 rejection must be withdrawn.

Independent claim 5 has also been further amended by incorporating therein the subject matter of now cancelled claims 7 and 8. To that end, claim 5 now recites a continuous

emulsification equipment for producing a type of process cheese comprising, in part, a transducer of the oscillating viscometer that is put into a mold form comprising a coating material made of fluorocarbon resin.

In the Official Action, claims 5-9 stand rejected as being clearly anticipated by either JP 9-502886, JP 8-266222, or JP 3-295442. In rejecting the claims over each of the cited references, other than remarking that "the output line in either one of the references inherently shows detected values", it appears as if Examiner merely just wishes away the claims by relying solely on the following omnibus statement that "the structural features of the instantly rejected claims are structurally met by either one of the references". *See* Official Action, page 4. In other words, Applicants submit that there is not any analysis provided by Examiner that actually and specifically explains why each of the limitations of each pending claim is anticipated. Indeed, there is not even a single specific citation to any of the three cited references that might begin to allow Applicant to understand why exactly any of the three references anticipate the pending claims. For at least those reasons, the present rejection is wholly deficient and improper, and must be withdrawn. *See, e.g.,* MPEP 707.07(d) ("An omnibus rejection of the claim "on the references and for the reasons of record" is stereotyped and usually not informative and should therefore be avoided.").

The foregoing notwithstanding, the rejection of previously pending claims 5-9 as anticipated by either JP 9-502886, JP 8-266222, or JP 3-295442 is wrong for the additional reasons that follow, particularly in view of claim 5 as now amended.

Claim 5 now requires an oscillating viscometer that is provided to the holding pipe or the carrying out pipe and a transducer of the oscillating viscometer, wherein the transducer is put into a mold form that includes a coating material made of fluorocarbon resin.

Indeed, the present invention has the characteristics of continuously and stably obtaining process cheeses of a given viscosity by putting a transducer of an oscillating viscometer into a mold form having a coating material made of fluorocarbon resin into the pipe in which the cheeses flow, and adjusting control factors so that the values detected by the inserted transducer become near target values set in advance.

With respect to the anticipation rejection, Examiner certainly appreciates that "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Neither JP 9-502886, JP 8-266222, or JP 3-295442 disclose all of the features of amended claim 5 and, thus, the anticipation rejection must be withdrawn, as explained next.

Upon review of JP 09-502886, the reference appears to disclose a process and equipment for continuous production of cheese in which cheese is produced by measuring the viscosity of cheese via the pressure drop of the cheese flowing in a pipe and by circulating the cheese. In other words, instead of using an oscillating viscometer and a transducer into a mold form having a fluorocarbon resin coating, as required by claim 5, the viscosity of process cheese in JP 09-502886 is merely examined using a differential pressure measurement. Indeed, JP 09-502886 simply fails to disclose Applicants' oscillating viscometer and transducer, which is in mold form and has a fluorocarbon resin coating.

Furthermore, Applicants submit that it is impossible to stably measure the viscosity of the process cheese type product produced in JP 09-502886 by using the pressure drop of the pipe in which the cheese flows. In other words, the method disclosed in JP 09-502886, that is, the method using the pressure drop, has the following problems:

However, among conventional viscosity measuring methods, a method, in which the viscosity of process cheese is estimated based on pressure drop during transfer of melted cheese or agitation torque, does not readily measure an exact viscosity. When process cheese type is produced by controlling production conditions based on such inexact viscosity, there is a possibility that process cheese having desired quality is not produced (For example, please refer a following Comparative Example).

See the present specification at page 3, lines 2 to 7 from the bottom. The present invention solves this problem. By way of example, the present specification discusses the invention of JP 09-502886 as Comparative Example on page 20, which is set forth below:

Comparative Example

Instead of the oscillating viscometer, the viscosity of process cheese was examined based on a differential pressure measurement.

In the continuous production equipment shown in Fig. 1, two holes, which were arranged perpendicularly, were formed in the sidewall of the cooling chamber 8. With the two holes, both ends of a pipe were provided, a pump was provided with the pipe, and thereby a by-pass line in a perpendicular direction was formed. Then, two pressure gauges were provided with the by-pass line, and differential pressure was measured, and thereby the viscosity of cheese in the cooling chamber was evaluated.

However, since variation of the differential pressure during operation is large, and the differential pressure was not stable, this method was not suitable for monitoring the viscosity of cheese. In addition, it was impossible to utilize the differential pressure for auto-control.

In other words, the present invention can measure exactly the viscosity and can stabilize quality of the process cheese type product, as compared with the method disclosed in JP 09-502886. See the present description at page 17, lines 5 to 14. Such effects can be obtained by the present invention for the first time, and could not be obtained by JP 09-502886.

Further with respect to JP 08-266222, upon review, this reference appears to relate to a heating apparatus comprising an agitation device for agitating natural cheese-like process cheese with any agitation intensity. In addition, JP 08-266222 appears to disclose a method for calculating the viscosity of the natural cheese-like process cheese based on electrical power of a

motor used to agitate. Like JP 09-502886 above, JP 08-266222 does not disclose equipment which includes an oscillating viscometer and a transducer that is in mold form and has a fluorocarbon resin coating, as required by claim 5, to measure the viscosity of the process cheese type.

Finally, upon review of JP 03-295442, this reference appears to disclose using a heating element sensor in a process of producing curdled milk after adding milk coagulating enzyme in milk in a coagulating tank. Moreover, the heating element sensor is a sensor in which temperature of milk and the heating element sensor is detected, and the temperature difference between them and the temperature variation of the heating element are continuously examined, and viscosity variation of the milk is detected based on the results. Again, as with JP 09-502886 and JP 08-266222, JP 03-295442 does not disclose equipment which includes an oscillating viscometer and a transducer that is in mold form and has a fluorocarbon resin coating, as required by claim 5, to measure the viscosity of the process cheese type.

In view of all of the above, it is clear that neither JP 09-502886, JP 8-266222, or JP 295442 discloses (or suggests) equipment for producing a type of process cheese which includes an oscillating viscometer and a transducer of the oscillating viscometer wherein the transducer is put into a mold form comprising a coating material made of fluorocarbon resin. Accordingly, claim 5, and its dependent claims, is not at all anticipated by claims JP 09-502886, JP 8-266222, or JP 295442. Thus, the rejection is overcome and must be withdrawn.

No Prima Facie Case

For all of the above reasons, it is submitted that the claims as pending are patentable over the cited references, and that no prima facie case of obviousness was made

before, nor would be applicable here over that same art. In that regard, the additional art cited by Examiner as being of interest is submitted not to change the situation.

Conclusion

As a result of the remarks given herein, Applicants submit that the rejections of the pending claims have been overcome. Therefore, Applicants respectfully submit that this case is in condition for allowance and request allowance of the pending claims.

If Examiner believes any detailed language of the claims requires further discussion, Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. Applicants also have submitted all fees believed to be necessary herewith. Should any additional fees or surcharges be deemed necessary, Examiner has authorization to charge fees or credit any overpayment to Deposit Account No. 23-3000.

Respectfully submitted,

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